

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

 X ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934 for the fiscal year ended December 31, 2002

or

 TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934 for the transition period from
_____ to _____

Commission File Number

- A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

WPS Resources Corporation
Non-Employee Director Deferred Compensation
and Deferred Stock Unit Plan

- B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

WPS Resources Corporation
700 North Adams
P. O. Box 19001
Green Bay, WI 54307-9001

**WPS RESOURCES CORPORATION
NON-EMPLOYEE DIRECTOR
DEFERRED COMPENSATION AND
DEFERRED STOCK UNIT PLAN**

**Financial Statements as of and for the
Years Ended December 31, 2002 and 2001
and Independent Auditors' Report**

WPS RESOURCES CORPORATION NON-EMPLOYEE DIRECTOR DEFERRED COMPENSATION AND DEFERRED STOCK UNIT PLAN

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INDEPENDENT AUDITORS' REPORT

To the Participants of WPS Resources Corporation
Non-Employee Director Deferred Compensation
and Deferred Stock Unit Plan

We have audited the accompanying statements of financial condition of WPS Resources Corporation Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan as of December 31, 2002 and 2001, and the related statements of income and changes in plan equity for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the Plan's financial condition as of December 31, 2002 and 2001, and the income and changes in Plan equity for the years then ended in conformity with accounting principles generally accepted in the United States of America.

July 17, 2003

WPS RESOURCES CORPORATION
NON-EMPLOYEE DIRECTOR DEFERRED COMPENSATION AND
DEFERRED STOCK UNIT PLAN

STATEMENTS OF FINANCIAL CONDITION
DECEMBER 31, 2002 AND 2001
(IN THOUSANDS)

	2002	2001
ASSETS -		
Receivable from WPS Resources Corporation	<u>\$ 3,563</u>	<u>\$ 2,775</u>
PLAN EQUITY	<u>\$ 3,563</u>	<u>\$ 2,775</u>

See notes to financial statements.

WPS RESOURCES CORPORATION
NON-EMPLOYEE DIRECTOR DEFERRED COMPENSATION AND
DEFERRED STOCK UNIT PLAN

STATEMENTS OF INCOME AND CHANGES IN PLAN EQUITY
YEARS ENDED DECEMBER 31, 2002 AND 2001
(IN THOUSANDS)

	2002	2001
INCOME:		
Participant deferred compensation	\$ 442	\$ 643
Deemed interest and dividend credits	251	194
Deemed net unrealized appreciation of investments	105	32
Transfer in from WPS Resources Corporation Deferred Compensation Plan	<u>-</u>	<u>1,937</u>
 Total additions	 798	 2,806
DEDUCTIONS -		
Benefits paid to participants	<u>10</u>	<u>31</u>
 Total deductions	 10	 31
INCREASE IN PLAN EQUITY	788	2,775
PLAN EQUITY, BEGINNING OF YEAR	<u>2,775</u>	<u>-</u>
 PLAN EQUITY, END OF YEAR	 <u>\$ 3,563</u>	 <u>\$ 2,775</u>

See notes to financial statements.

WPS RESOURCES CORPORATION NON-EMPLOYEE DIRECTOR DEFERRED COMPENSATION AND DEFERRED STOCK UNIT PLAN

NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 2002 AND 2001 (IN THOUSANDS)

1. DESCRIPTION OF THE PLAN

General - WPS Resources Corporation (the "Company") sponsors the WPS Resources Corporation Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan (the "Plan"). The Plan was formed by the Company on January 1, 2001. The following brief description of the Plan provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

The Plan is a non-qualified, deferred compensation plan. The Plan is not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

Participation - The Plan is designed for participation by the non-employee members of the Board of Directors of the Company (the "Directors" or "Plan participants"). Prior to 2001, Directors participated in the WPS Resources Corporation Deferred Compensation Plan. Director account balances totaling \$1,937,000 were transferred to the Plan from the WPS Resources Corporation Deferred Compensation Plan in 2001.

Participant Deferrals - Each participant can elect contributions up to 100% of his or her director fees, in increments of 1%.

Deferred Stock Units - The Board may from time to time direct that a portion of the remuneration to be earned by a Director for service on the Board shall be credited under this Plan in the form of Deferred Stock Units. Directors are not able to exercise investment direction for these awards. These awards are credited in the form of hypothetical shares of WPS Resources stock. Deferred stock unit awards during the years ended December 31, 2002 and 2001 were \$260 and \$240, respectively.

Plan Termination - Although it has not expressed any intention to do so, the Company's Board of Directors has the right to amend or terminate the Plan provided that no amendment or termination may reduce or eliminate any account balance accrued to the date of such amendment or termination (although pending final distribution, the account will continue to increase or decrease in value based on deemed investment gains or losses). Upon termination, the assets then remaining shall be subject to applicable

provisions of the Plan then in effect and shall be used to pay benefits to participants in order of their entitlement.

Vesting - Participants are immediately and fully vested in all contributions and earnings.

Participant Accounts - Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's deferrals and deemed investment gains, and charged with benefit distributions, if applicable, and allocations of deemed investment losses. The deemed investment gains and losses are determined based upon the hypothetical investment options elected by Plan participants.

Distributions - Unless the participant has selected a later commencement date, distribution of a participant's account commences within 60 days following the end of the calendar year in which the participant terminates service on the Board of Directors. Distributions will be made in 1 to 15 annual installments, as elected by the participant. Participants who retired or terminated before 2001 receive their distribution according to the provisions of the WPS Resources Corporation Deferred Compensation Plan at the time they separated from service. Distributions from the Plan are paid in cash with the exception of distributions from hypothetical investments in WPS Resources common stock, which are paid out in WPS Resources common stock.

Investments - Investments represent hypothetical investments that are maintained for record keeping purposes only. Participants direct their cash deferrals into various investment fund equivalents offered by the Plan. The investment fund equivalents currently offered by the Plan to participants include mutual funds, reserve account B, and WPS Resources common stock. Reserve account B provides for an interest equivalent credit of 70% of the Company's consolidated return on common equity or a minimum return established by the Plan. While participating in the WPS Resources Corporation Deferred Compensation Plan and prior to January 1, 1996, participants were able to defer into reserve account A. Reserve account A provides for an interest equivalent credit of 100% of the Company's consolidated return on common equity. As of December 31, 2002 and 2001, hypothetical investments in WPS Resources common stock were \$1,983 and \$1,146, respectively.

The following is a summary of the deemed net unrealized appreciation of investments; for the years ended December 31, 2002 and 2001:

	2002	2001
WPS Resources common stock	\$ 111	\$ 32
Mutual funds	<u>(6)</u>	<u>-</u>
Deemed net unrealized appreciation of investments	<u>\$ 105</u>	<u>\$ 32</u>

Grantor Trust - Wisconsin Public Service Corporation, a wholly owned subsidiary of the Company, established a Grantor ("Rabbi") Trust in July 1988. The Trust was most recently amended and restated in May 2001. The Trust is governed by and subject to the terms of a trust agreement entered into between the Company, as Grantor, and State Street Bank and Trust Company, the current Trustee. Although the Company maintains a Grantor Trust and may use the Trust, at their discretion, to accumulate certain assets to assist the Company in meeting its obligations under the Plan, the Plan has no investments of its own. The sole asset of the Plan is a receivable from the Company in an amount equal to the value of all participant accounts. Obligations in excess of assets held by the Grantor Trust are paid through the assets of the Company.

Administration - The Plan is administered by the Compensation and Nominating Committee of the Board of Directors. The Committee administers and interprets the Plan and supervises preparation of the various forms and elections required pursuant to the Plan. Participants' accounts are maintained by Clark Consulting, a third party administrator. Prior to June 2001, the participant accounts were maintained by Wisconsin Public Service Corporation, a wholly-owned subsidiary of the Company.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan administrator to make estimates and assumptions that affect the reported amounts of assets, income, deductions, and changes in Plan equity. Actual results could differ from those estimates.

Receivable from the Company - As explained in Note 3 the Plan is unfunded with benefits paid solely out of the general assets of the Company. The Plan records a receivable from the Company equal to the sum of all participant account balances.

Administrative Expenses - Costs of establishing and administering the Plan are paid by the Company and not recorded within the financial statements of the Plan.

3. INCOME TAX STATUS

Because the Plan is unfunded with benefits paid solely out of the general assets of the Company, no provision for federal income taxes have been made in the accompanying financial statements. The Plan is not required to maintain its assets in a trust. The Plan is a nonqualified plan for federal income tax purposes and is not subject to the qualification requirements of Section 401 of the Internal Revenue Code of 1986, as amended.

* * * * *

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan Administrator of the WPS Resources Corporation Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan has duly caused this Transition Report to be signed on its behalf by the undersigned hereunto duly authorized, in the City of Green Bay and the State of Wisconsin this 9th day of September, 2003.

WPS RESOURCES CORPORATION
NON-EMPLOYEE DIRECTOR DEFERRED COMPENSATION
AND DEFERRED STOCK UNIT PLAN

By: /s/ Joseph P. O'Leary
Joseph P. O'Leary
Senior Vice President and Chief Financial Officer
on behalf of WPS Resources Corporation, which administers
the WPS Resources Corporation Non-Employee Director
Deferred Compensation and Deferred Stock Unit Plan

WPS RESOURCES CORPORATION

Exhibit Index to Form 11-K
for the Fiscal Year ended December 31, 2002

**Exhibit
Number**

32 Certification Pursuant to 18 U.S.C. Section 1350

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

Solely for the purpose of complying with Section 1350 of Chapter 63 of Title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned hereby certify, based on their knowledge, that the WPS Resources Corporation Non-Employee Director Deferred Compensation and Deferred Stock Unit Plan (the "Plan") Annual Report on Form 11-K for the period ended December 31, 2002 (the "Report") fully complies with the requirements of Section 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the net assets available for benefits of the Plan.

Dated: September 9, 2003

/s/ Joseph P. O'Leary
Joseph P. O'Leary
Senior Vice President and Chief Financial Officer
WPS Resources Corporation

/s/ Bernard J. Trembl
Bernard J. Trembl
Vice President - Human Resources
WPS Resources Corporation

A signed original of this certification required by 18 U.S.C. Section 1350 has been provided to the Plan and will be retained by the Plan and furnished to the Securities and Exchange Commission or its staff upon request.